

CLAIMS

1. A base station apparatus comprising:

- 2 a processor operative to control transmission and retransmission of
data; and
- 4 a memory storage device operative for storing a plurality of
computer-readable instructions, comprising:
- 6 a first set of instructions for determining a transmission frame
error rate and a retransmission frame error rate;
- 8 a second set of instructions for determining a transmission
energy setpoint as a function of the transmission frame
error rate and the transmission quality; and
- 10 a third set of instructions for determining a retransmission
energy setpoint as a function of the retransmission frame
error rate and the retransmission quality.

2. The base station of claim 1, wherein the transmission quality is measured
by a received error indication signal.

3. The base station of claim 1, wherein the transmission energy setpoint
and the retransmission energy setpoint are determined as traffic to pilot ratios.

4. The base station of claim 1, wherein the third set of instructions
determines the retransmission energy setpoint as a function of the
retransmission frame error rate, the retransmission quality, and the transmission
energy setpoint.

5. The base station of claim 4, wherein the third set of instructions
determines the retransmission energy setpoint by adding a delta value to the
transmission energy setpoint.

6. In a wireless communication system, a method comprising:

2 determining a transmission energy setpoint to achieve a
transmission frame error rate;

- 4 adjusting the transmission energy setpoint on occurrence of a
transmission error;
- 6 determining a retransmission energy setpoint to achieve a
retransmission frame error rate; and
- 8 adjusting the retransmission energy setpoint on occurrence of a
retransmission error.

7. The method of claim 6, wherein adjusting the retransmission energy
2 setpoint further comprises:

- 4 adjusting the retransmission energy setpoint as a function of the
transmission energy setpoint.

8. The method of claim 6, wherein adjusting the retransmission energy
2 setpoint further comprises:

- 4 adjusting the retransmission energy setpoint to achieve a desired
frame error rate for retransmission.

9. The method of claim 6, wherein adjusting the transmission energy
2 setpoint further comprises:

- 4 adjusting the transmission energy setpoint to achieve a desired
frame error rate for transmission.

10. The method of claim 6, wherein the transmission frame error rate is
2 greater than the retransmission frame error rate.

11. The method of claim 6, wherein the transmission frame error rate and the
2 retransmission frame error rate result in a desired total frame error rate.

12. The method of claim 6, wherein the transmission frame error rate and the
2 retransmission frame error rate are predetermined values.

4 13. The method of claim 6, wherein the transmission frame error rate and the
retransmission frame error rate are dynamic values.